DOCUMENT RESUME

ED 062 299 SP 005 677

AUTHOR Pyatte, Jeff A.
TITLE The Effectiveness of Performance-Based Training Modules on Planning and Presenting.
INSTITUTION University of West Florida, Pensacola.
PUB DATE 72
NOTE 26p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, Ill., April 1972)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Inservice Teacher Education; *Lesson Plans; *Performance Criteria; *Preservice Education; *Teacher Education

ABSTRACT

The effectiveness of self-instructional, performance-based modules used in teacher training programs is evaluated in this study. Criterion-referenced tests were used to determine the degree of achievement of the module objectives. Three classes of students enrolled in Designs for Teaching at the University of West Florida provided the group of preservice teachers used in the study. Fourteen teachers enrolled in an off-campus course for teachers who were supervising student teachers made up the group of in-service teachers. A questionnaire was developed to elicit a reaction to the performance-based module. Part 1 of the questionnaire determined the reaction to the content of instructional material, the instructional mode used, and the method of implementation. An 11-point scale measuring like or dislike was provided. Part 2 of the questionnaire was designed to elicit response to the same items, using the same scale; however, a space was provided for a constructed response to the statement "Please explain why." Part 1 was to be completed in class, and part 2 was to be completed out of class. The results of this study indicated that performance-based modules can be used effectively with both preservice and in-service teachers. A 5-item bibliography and appendix with evaluation reports are included. (MJM)

ED 062299

N-A1
SP

THE EFFECTIVENESS OF PERFORMANCE-BASED TRAINING MODULES ON PLANNING AND PRESENTING

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

Faculty of Professional Education
University of West Florida
Pensacola, Florida 32504

Jeff A. Pyatte
Assistant Professor of Education

AERA 1972

SP005677

INTRODUCTION

The concept of performance-based teacher education is receiving increasing attention by educational practitioners and theoreticians as well. According to a survey by the New Careers Development Center at New York University, sixteen states are developing means for performance-based certification.[1] The Florida Department of Education, for example, has taken the position that teacher certification should move toward the performance end of a continuum having non-performance criteria, such as personal traits, knowledge, and intelligence, at one end and demonstrated performance at the other.[2] While the status and the future of performance-based teacher education is uncertain, the potential impact of the movement is great enough to warrant careful and serious attention. Elam, for instance, has said that if teacher certification is removed from successful completion of a prescribed college curriculum and opened to anyone who can meet certain performance criteria, the impact on existing institutions will be enormous.[3] Although it is doubtful whether performance-based teacher certification would either be removed entirely from college curricula or whether non-performance bases would be eliminated, the impact on existing institutions would, in any case, be great.

If performance-based teacher education is to become a successful movement, the concept must be built so that a number of crucial problems can be solved. Two such problems are: 1) establishing the relationship between required teacher behaviors and resulting pupil learning, and 2) developing ways of measuring the effectiveness of training materials designed to develop competencies in teacher trainees.

Under its research and development program, the Florida Department of Education is attacking both of these problems. By the end of 1974, evidence will be available showing relationships between teacher competencies and pupil learning, and training materials will be available to help teachers develop specific competencies.[4]

A necessary part of any program to develop performance-based materials for training teachers is the development of evaluation models for measuring the effectiveness of these materials. While the Florida research and development effort in the area of performance-based teacher training materials includes a review-evaluation-cataloging center, no design for measuring the effectiveness of training materials is yet operational.

---

[1] Education Recaps 10:6 March 1971, p. 8.

[2] Fred Daniel, "Performance-based Certification: Florida's Projected Program" (Tallahassee, Fla.: Florida Department of Education), May 5, 1971 (memographed), p. 1.

[3] Stanley Elam, A Resumé of Performance-Based Teacher Education: What is the State of the Art? (AACTE ~~Bulletin~~ PBTE Series: No. 1-A), March 1972, p. 5.

[4] There's a New School Coming, Third Annual Report of the Florida R & D Program (Tallahassee, Fla.: Florida Department of Education, Division of Elementary and Secondary Education), January 13, 1972, p. 3.

In fact, although the demand for them is increasing, evaluation designs are not readily available from any source.

THE PROBLEM

Performance-based modules in a self-instructional format are becoming an increasingly significant part of the instructional component of teacher training programs in many institutions throughout the country. Several states are planning to base their teacher certification on demonstrated performance of specified competencies, so it is unlikely that training modules will soon decline in importance as a means of developing teaching competencies. Measurement of the effectiveness of performance-based teacher training modules is a task of utmost importance to the developer who must convince the user that they, too, perform. This study had two purposes, both related to the evaluation of self-instructional, performance-based modules used in teacher training programs. First, a simple evaluation design was used to determine the effectiveness of two modules used with preservice and inservice teachers. Secondly, a questionnaire was used to determine whether these two groups of teachers reacted differentiy to the modules.

MATERIALS, SUBJECTS AND PROCEDURES

Materials

Modules

Two performance-based, self-instructional packages, called modules, were used in this study.[5] Each module contained all the information and directions required for the learner to achieve several observable, measurable goals. A set of learning activities was used to develop the instruction for each objective in a module. The set consisted of 1) exposure to the objective of the set, 2) practice with the concept involved, 3) feedback on the practice, 4) confirmation of feedback, 5) review of concept, and 6) evaluation. The evaluation for each set provided the basis for a criterion-referenced test item to be used on the posttest for the module. Criterion-referenced test items for all of the objectives in a module constituted the posttest for that module.

While the modules were self-instructional, they were not programmed. An attempt was made to find a style of writing that avoided both linear programming, which bores many prospective teachers, and the purely textual mode, which lacks an adequate instructional element. The style represents an effort to achieve a mode of self-instruction that is less a program than the typical self-instructional learning sequence but more a program than is the typical textbook.

The two modules are companions in a package on TECHNIQUE OF INSTRUCTION, GUIDE TO STUDENT PRESENTATIONS. PART I, "Preparing a Lesson Plan,"

---

[5]Originally there was only one module. On the basis of preliminary studies on effectiveness, the module was split for this study.

is designed to teach the student how to develop a short (5-15 minute) lesson plan. From this module, the student learns to develop a plan which employs a teaching model and conforms to the organizational principles of a standard outlining procedure. Sample plans prepared by students who have successfully implemented them are included in the module.

PART II, "Making a Presentation," is designed to teach the student to make an effective presentation of his lesson plan. From this module, he learns the techniques of effective presentations, how to allay fears, and how to evaluate presentations. The concluding activity requires the student to make a presentation of his planned lesson to his colleagues who serve as a "laboratory" class.

Instruments

Tests. Criterion-referenced tests were used to determine whether the objectives of the modules had been achieved by the students. One test was constructed for each module. Each test had one criterion-referenced item for each instructional set for which a written item was an appropriate test situation. The test for the module on preparing a plan had a total of fifteen items, and the test for the module on making a presentation had four. Tests for both modules demanded knowledge of the concepts developed; thus the emphasis was on recall.

Questionnaire. To elicit a reaction to the performance-based modules a two-part questionnaire was used. Part I of the questionnaire was designed to determine the reaction to the following three items: 1) the content of the instructional material, 2) the instructional mode used, and 3) the method of implementation. For each item, the student was directed to indicate whether he disliked or liked it by putting a check on an eleven point (-5 to +5) scale. He was further asked to check his reason for liking or disliking by putting one or more checks by a list of possible reasons. The list also provided an opportunity for the student to indicate reasons other than those given in the list.

Part 2 of the questionnaire was designed to elicit a response to the same three items--content, mode of instruction, and method of implementation. The same scale was used as was used in the first part. Instead of providing a list of reasons from which the reasons for his choice were to be selected, however, a space was provided for a constructed response to the statement "Please explain why." Part 1 of the questionnaire was designed to be completed in class, and part 2 was to be completed out of class.

Subjects

Three classes of students enrolled in Designs for Teaching at The University of West Florida provided the group of preservice teachers used in the evaluation study. Designs for Teaching is taken by fourth-year prospective teachers during the quarter preceeding student teaching. There were eleven students in one class, ten in the second class, and eleven in the third class for a total of thirty-two preservice teachers. Ordinarily, the students who take Designs will have had no previous teaching experience.

A few can be expected to have had some limited teaching experience. Some will have taught in special summer recreational programs, some in connection with other education courses, some in a special summer teaching program offered by the University, and some will have served as substitute teachers. Of the thirty-two preservice teachers, six had previously had such limited teaching experience. One had actually worked as a classroom teacher for a short time.

Fourteen teachers enrolled in an off-campus course for teachers who were supervising student teachers made up the group of inservice teachers. All of these had taught at least two years, and all were currently teaching. Although one of the inservice teachers had taught twenty years, the majority had from three to five years of teaching experience

Procedures

Evaluation Procedure

A simple single-criterion evaluation design[6] was used to determine the effectiveness of the two teacher-training modules. The design is intended only to yield a rough appraisal of effectiveness. While very useful, this appraisal should not be considered final. The greatest value of the evaluation design is in determining (1) whether the material being evaluated should be further revised and developed and (2) if a need for further development is indicated, where it is required.

The design concept is illustrated in Figure 1. It consists of a pretest and an identical posttest administered to groups of learners who have been through a self-instructional learning sequence.

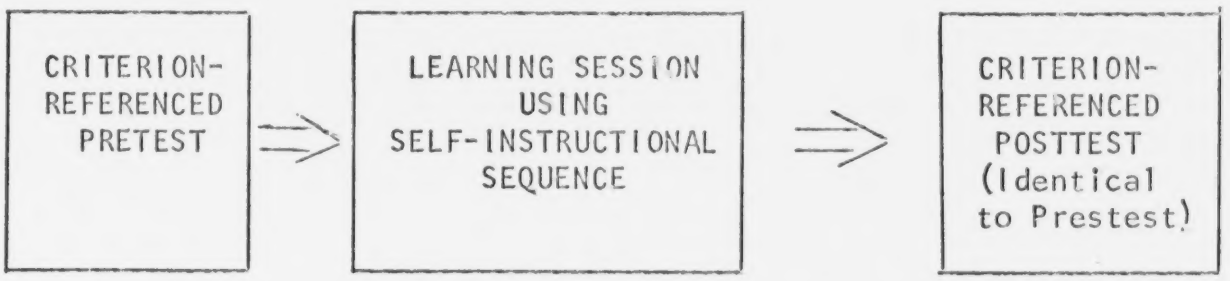
CRITERION-REFERENCED PRETEST
LEARNING SESSION USING SELF-INSTRUCTIONAL SEQUENCE
CRITERION-REFERENCED POSTTEST (Identical to Prestest)

Fig. 1. -- Visual Illustration of Simple Single-Criterion Evaluation Design

Data required for the appraisal of effectiveness are:

N = the number of students participating in the instructional sequence.

---

[6]Charles B. Havens, Measuring the Effectiveness of Programmed Instruction (Pensacola, Florida: Naval Air Basic Training Command), chap. II, 1967.

GROUP/MODE = the groups being compared/the modes of instruction being used (in this case only on mode -- self-instructional through modules).

PRETEST MEAN (Raw) = the mean of correct responses earned by students on the pretest.

% CORRECT PRETEST = the percent of the total of possible responses represented by the mean of correct responses on the pretest.

POSTTEST MEAN (Raw) = the mean of correct responses earned by students on the posttest.

% CORRECT POSTTEST = the percent of the total of possible responses represented by the mean of correct responses on the posttest.

% GAIN/LOSS PRE/POST TESTS = the difference between the percent correct on the pretest and the percent correct on the posttest.

NO. ITEMS ON PRE/POST TESTS the number of items on the posttest. (Since the pretest is identical to the posttest, there will be only one number.)

If the posttest consists of criterion-referenced test items taken from the instructional sets within the material, an item-by-item productivity analysis can be done which will indicate which sets need revision or further development.

Evaluation data produced for the design are reported in Part II of a MODULE EVALUATION REPORT form (see example on page 6). Space is provided in Part II of the form for presenting data from comparisons of either two groups or two modes of instruction.

MODULE EVALUATION REPORT

PART I -- THE MODULE

Title of Publication			
Author/Institution			Date of Publication
Type		Student Sample	
Number of Pages	Minimum Time	Mean Time	Maximum Time
Scope of Module			

PART II -- EVALUATION PROCEDURE AND DATA

Group/Mode	N	Pretest Mean(raw)	Percent Correct	Post Test Mean(raw)	Percent Correct	To Gain/Loss Pre to Post Test				No. Items on Pre/Post Test

PART III -- METHOD OF IMPLEMENTATION

Planned Method of Implementation in Instructional Situation	Individual Study	Collateral Study	In-Class Study	Other

Action Resulting From Implementation	Instructional Time Reduced	New Material Added		Other

Comments

Method of Implementation

The teacher training modules on planning and presenting were used in the classroom under supervision by the classroom instructor. All students studied copies of the material at the same time and in approximately the same instructional sequence. Using a classroom supervised method of implementation offered several advantages. It is important to note some of these, for the method is a departure from the completely self-instructional method.

1. Use of the modules to develop elementary nomenclature, fundamental concepts, rules, and other repetitive kinds of presentations of factual information freed the instructor to work with individual's problems and to spend more time dealing with areas not easily covered in the module format.

2. Instructional sessions controlled by the modules provided opportunities for the instructor to conduct group sessions as follow-up to the modules, to discuss special topics or problems, or as a recapitulation of facts and concepts. Such group activities allowed the instructor to guide students to a deeper understanding of the objectives and permitted sufficient oral reaction to clear up vague or confusing points.

3. Students were able to proceed at their own best rate of learning. Those who were slower could be assisted by the instructor; those who were faster could be challenged to gain a broader and deeper understanding of the material.

4. Students who completed the modules could be considered to have achieved approximately the same amount of learning. This made it much easier to proceed with other learning activities based on the concepts developed in the modules.

Administration Procedures

Both modules were administered in class under supervision. First, the package of two modules was introduced as a set of self-instructional materials designed to develop skills in planning a lesson and making a presentation of that lesson. After the introduction, a pretest for the module on planning was administered to every one in the class. Upon completing the pretest, each student was started in the module on planning, the first of the two modules taken. At this time, the student was given a sheet for recording the date of all the days he worked on the module, the beginning and ending time, and the total time in minutes spent on the module that day. During subsequent days, the student worked on the module when he had the time or when class time was set aside for such work.

Upon completing the first module, the posttest was administered. The pretest for the second module was then given, and the module started. The student was instructed to keep his time for that module also. After the second module had been completed and the posttest taken, the student was given the two-part questionnaire. He was told to complete part 1 of the questionnaire and return it before leaving for that day. The second part

he was told to complete at home and return it as soon as it had been completed.

The procedure for administering modules to both the preservice and the inservice groups was the same. The preservice teachers, however, had ample time to complete the modules. The class of inservice teachers had only two periods of two hours, fifteen minutes each to complete both modules. Inservice teachers also had to complete both parts of the questionnaire in class. Because of restrictions on time, part 2 of the questionnaire from the inservice teachers had to be omitted.

The modules were administered to the classes of preservice teachers as only a part of their total instructional activities. Classes met for one hour and twenty-five minutes two times a week for ten weeks. The longest interval of time spent on the modules was five weeks. Much more time was available for additional instruction for the classes of preservice teachers than was available for the inservice teachers.

RESULTS

Effectiveness

Complete data for determining the effectiveness of the modules with preservice teachers were obtained from all thirty-two preservice teachers. Of fourteen inservice teachers, complete data for determining the effectiveness of the module on planning were obtained from nine, and for determining the effectiveness of the module on presenting, complete data were obtained from seven.

The results of the evaluation procedure have been recorded in PART II of the MODULE EVALUATION REPORT form. Four completed copies of the form have been appended to this report. One for each of the two groups - preservice and inservice teachers - and one for each of the two modules. The results of Part II have been summarized and can be found in Table 1.

Table 1

Summary of the evaluation data from preservice and inservice teachers who completed the modules on planning and presenting.

Part 1: "Preparing a Lesson Plan"

GROUP/MODE	N	PRETEST MEAN (RAW)	PERCENT CORRECT	POSTTEST MEAN (RAW)	PERCENT CORRECT	% GAIN/LOSS PRE TO POST TEST	NO. ITEMS ON PRE/POST TEST
Single mode (self-instructional) preservice teachers	32	1.7	11.3	11.1	74.0	62.7	15
inservice teachers	9[a]	0.6	4.0	9.4	63.0	59.0	15

Part II: "Making a Presentation"

GROUP/MODE	N	PRETEST MEAN (RAW)	PERCENT CORRECT	POSTTEST MEAN (RAW)	PERCENT CORRECT	% GAIN/LOSS PRE TO POST TEST	NO. ITEMS ON PRE/POST TEST
Single mode (self-instructional) preservice teachers	32	0.0	0.0	3.5	85.0	85.0	4
inservice teachers	7[b]	0.0	0.0	3.2	80.0	80.0	4

[a]Five of fourteen inservice teachers failed to show for planning module posttest.

[b]Two additional inservice teachers failed to complete the presenting module in the alotted time.

In a study of this kind some point must be established for deciding when a module is effective. Strictly interpreted, the concept of performance based teacher training employs a pass-fail criterion and, therefore, requires 100% achievement of objectives if instruction is to be considered effective. In most cases, however, this is unrealistic. Preliminary evaluation studies on the effectiveness of the materials used in this study had indicated that a mean of correct responses of about eighty percent was achievable. For the purposes of this study, then, a mean of correct responses of eighty percent was established as the point for deciding effectiveness. Assuming a zero starting point, not an unreasonalbe assumption when performance depends heavily on vocabulary as it did in the two modules evaluated, the decision that a module is effective was made at the point where percent gain from pretest to posttest reached eighty.

Applying this criterion, the module on presenting, which yielded 85% gain for preservice teachers and 80% gain for inservice teachers, was considered effective. The module on planning was deemed to be in need of revision since its yielded gain was less than 80% in both groups. The data clearly indicate that the majority of both groups achieved the objectives of both modules - as they were measured by the criterion-referenced tests. More than this must be demanded of performance-based instructional materials, but just how much more is a debatable question.

Productivity data for the module on planning can be found in Table 2 and Table 3. If the same criterion of eighty percent is applied to each instructional set as was applied to an entire module and if that criterion is required of both groups of teachers, only the sets tested by items number 1, 2, 6, and 9 were not in need of revision. Therefore, extensive revision of the planning module was indicated. The productive sets delt with the teaching model, ways of motivating for learning, and ways of evaluating learning.

Table 2

Productivity of Sets for the Module on Planning for Thirty-two Preservice Teachers

Test Item Number	Pretest	Posttest	% of Students Responding Correctly (Posttest Only)
1	15	28	88
2	1	32	100
3	1	32	100
4	2	25	78
5	0	21	66
6	1	31	97
7	0	19	59
8	0	18	56
9	1	31	97
10	0	17	53
11	3	26	81
12	0	22	69
13.	0	14	44
14	6	14	44
15	22	26	81

Table 3

Productivity of Sets for the Module on Planning for Fourteen Inservice Teachers

Test Item Number	Pretest	Posttest[a]	% of Students Responding Correctly (Posttest Only)
1	1	8	89
2	0	9	100
3	0	7	78
4	0	6	67
5	0	5	56
6	0	8	89
7	0	5	56
8	0	4	44
9	0	8	89
10	0	4	44
11	0	6	67
12	0	3	33
13	0	2	22
14	2	5	56
15	6	6	67

[a]Five inservice teachers failed to show up for posttest.

Reactions

Only one preservice teacher failed to respond to part 1 of the questionnaire designed to elicit reactions to the content of the instructional material, the mode of instruction, and method of implementation. One other preservice teacher was given a faulty questionnaire, and his responses were not counted. All seven of the inservice teachers who completed the two modules returned part 1 of the questionnaire.

On an eleven point scale (-5 to +5) of dislike to like, the reactions to content were very positive for both the preservice and the inservice groups.

For the preservice teachers there were:

1 at -1;
2 at 0;
1 at +1;
8 at +3;
13 at +4;
5 at +5;

and 0 at all other points.

For the inservice teachers there were:

2 at +3;
2 at +4;
3 at +5;

and 0 at all other points.

The following array of choices of reasons was provided for the reaction to content.

Dislike
- Too simple _____
- Too difficult _____
- Confusing _____
- Dull _____
- Other _____

Like
- Easy _____
- Clear _____
- Useful _____
- Other _____

Preservice teachers checked clear and useful with about equal frequency (19 and 20, respectively), whereas inservice teachers checked clear only half as frequently as they checked useful (3 and 6, respectively). Six preservice responses and one inservice response indicated that some liked the content because it was easy. Responses in the "other" category were: different; gives definite suggestions for planning and teaching.

Those preservice teachers who expressed a neutral feeling for a dislike for the content did so because they considered it dull (1 response) or confusing (1 response). The remaining preservice teacher who indicated a dislike wrote "redundant" in the blank provided for "other" reasons.

Reactions to the mode of instruction also were very pos..ve. For the preservice teachers there were

1 at -3;
1 at 0;
2 at +2;
5 at +3;
6 at +4;
15 at +5;

and 0 at all other points.

For the inservice group there were:

1 at +2;
3 at +4;
3 at +5;

and 0 at all other points.

The following array of choices of reasons was provided for the reaction to mode of instruction.

Dislike
- Too simple _____
- Too difficult _____
- Confusing _____
- Other _____

Like
- Go at own rate _____
- Not too demanding _____
- Challenging _____
- Other _____

The overwhelming choice of reason for liking the material was that it allowed students to go at their own rate (27 responses for preservice teachers; 6 for inservice teachers). Five preservice responses and two inservice responses were recorded for like it because it is not too demanding; three each for like it because it was challenging.

Feelings of dislike for the mode of instruction came from the preservice teachers. One expressed the feeling that the mode was confusing, one that it was too mechanical and lasted too long. No one felt that the mode was either too simple or too difficult.

Reactions to method of implementation were more mixed than reactions to either content or mode of instruction. For preservice teachers there were:

1 at -5;
1 at -3;
2 at -1;
3 at 0;
5 at +3;
11 at +4;
7 at +5;

and 0 at all other points.

For inservice teachers there were:

1 at -3;
2 at +3;
2 at +4;
2 at +5;

and 0 at all other points.

The following array of choices of reasons was provided for the reaction to the method of implementation.

Dislike
Prefer to do outside class _____
Not enough time allowed _____
Other _____

Like
Definite time set aside _____
Instructor available _____
Other _____

The reason most frequently given for liking the method of implementation was the availability of an instructor (21 responses for preservice teachers; 5 for inservice). Fifteen and 2 responses, respectively, for preservice and inservice teachers indicated "definite time set aside" was the reason for liking the method. One preservice teacher liked the method because it was "flexible."

Members of both groups who disliked the method did so because of a preference to do the work outside of class (5 responses for preservice teachers; 1 for inservice). Other negative responses were: classroom noise distracting, more time needed, and more discussion needed.

None of the inservice teachers was able to complete part 2 of the questionnaire. Twenty-seven preservice teachers returned part 2 completed. The consistency of their responses on the eleven point scale was remarkable. The average departure from the response to part 1 of the questinnaire was less than one scale division in the eleven. Only one student departed as much as four divisions, and most who departed at all were only one division away from their response to part 1.

The constructed responses yielded very little information that was not available from part 1 of the completed questionnaire. Two students called attention to the fact that too much emphasis on knowledge caused the content to become boring. One expressed the feeling that the mode of

instruction put the responsibility for learning where it belonged--on the student. But another felf that self-instruction "hand leads" too much.

Regarding the method of implementation, notable comments were:

Working in class was good because it provided opportunities to discuss things with classmates.

More time should be used for discussion and less for content.

Discussion with classmates was difficult because each was at a different place in the module.

Extra time was required each class meeting to deal with materials, recording, reviewing, etc.

SUMMARY OF FINDINGS

1. Using 80% gain from pretest to posttest as a criterion for determining whether a module is effective, "Preparing a Lesson Plan," the module on planning, was considered ineffective. "Making a Presentation," the module on presenting, was considered effective.

2. The effectiveness of the modules was unrelated to groups of teachers. What was effective with preservice teachers was also effective with inservice teachers; what was ineffective with one group was ineffective with the other group.

3. On the basis of part 1 of a two-part questionnaire, the reactions of both preservice and inservice teachers to the modules was very favorable.

4. No discernable difference in the overall reactions of preservice teachers and inservice teachers was found to be supported by data from part 1 of the questionnaire. Both groups reacted favorably to the modules.

5. Preservice teachers indicated that they liked the content of the modules because it was both clear and useful, whereas inservice teachers indicated that they liked it because it was useful.

6. Both groups of teachers indicated that they liked the mode of instruction because it allowed them to progress at their own rate.

7. Some members of both groups of teachers reacted strongly negative to the method of implementation, indicating that they would prefer to complete the modules out of class. Most teachers reacted favorably to method, however, indicating that they liked having a definite time to work when an instructor was available.

DISCUSSION

Preliminary evaluation studies using the materials with preservice teachers only had indicated that both modules would be effective if an 80% gain from pretest to posttest was required. To achieve this, it had been estimated, would take a mean time of about four hours for the two modules--which were only one when the preliminary studies were done. The mean time required for preservice teachers to complete both modules in this study was 279 minutes (see Appendix; MODULE EVALUATION REPORT). Preliminary estimates were close to correct, the difference very likely introduced as a consequence of splitting the original module.

Ideally, the four and one-half hours available for the inservice teachers would have been ample time to complete both modules. Two sessions, however long, are not enough time to complete the work. Some time is needed as a "break" during which time the learner can assimilate the material. Two one hour sessions per week for three weeks probably would be adequate.

Reactions to the original module were favorable, as they were to both modules used in this study. The reasons for liking the material were very much the same in the preliminary studies as in this: clear, concrete, useful. The reasons for not liking the material were not the same in the preliminary studies. Not many of the preservice teachers expressed dislike for the original module, but those who did disliked it because it was undemanding. No one in this study expressed the feeling that the modules were undemanding.

The results of this study indicate that performance-based modules like the ones used can be used effectively with both preservice and inservice teachers. When used with inservice teachers, the utility of the concepts and skills should be emphasized. A mixed method of implementation, allowing some students to work outside class and others in class under supervision, should be used with both preservice and inservice teachers.

REFERENCES

Daniel, Fred K. "Performance-based Certification: Florida's Projected Program." Tallahassee, Fla.: Florida Department of Education. May 5, 1971. (mimeographed), 8 pp.

Education Recaps 10:6 March 1971.

Elam, Stanley. A Resumé of Performance-Based Teacher Education: What is the State of the Art? AACTE Bulletin PBTE Series: No. 1-a. March 1972. 10 pp.

Havens, Charles B. Measuring the Effectiveness of Programmed Instruction. Pensacola, Fla.: Naval Air Basic Training Command. 1967. 47 pp.

There's A New School Coming. Third Annual Report of the Florida R & D Program. Tallahassee, Fla.: Florida Department of Education, Division of Elementary and Secondary Education. January 13, 1972. 22 pp., Appended.

APPENDIX

MODULE EVALUATION REPORT

PART I -- THE MODULE

Title of Publication			
Technique of Instruction, Guide to Student Presentations, Part I: "Preparing A Lesson Plan"			
Author/Institution: Dr. Jeff A. Pyatte, Faculty of Professional Education, University of West Florida, Pensacola, Florida 32504			Date of Publication: February 1971
Type: Self-instructional		Student Sample: 32 Preservice Teachers	
Number of Pages: Thirty-two (32)	Minimum Time: 80 Minutes	Mean Time: 204 Minutes	Maximum Time: 287 Minutes

Scope of Module

Planning a lesson using concept of a teaching model; making lesson plan according to organizational principles of outlining; selecting appropriate topic for 5-15 minute lesson; developing plan for 5-15 minute lesson (includes samples of plans which have been successfully implemented.)

PART II -- EVALUATION PROCEDURE AND DATA

Group/Mode	N	Pretest Mean(raw)	Percent Correct	Post Test Mean(raw)	Percent Correct	To Gain/Loss Pre to Post Test					No. Items on Pre/Post Test
Single Mode (self-instructional)	32	1.7	11.3	11.1	74.0	62.7					15

PART III -- METHOD OF IMPLEMENTATION

Planned Method of Implementation in Instructional Situation	Individual Study	Collateral Study	In-Class Study (Supervised)	Other
			X	

Objectives were achieved by most preservice teachers. Material should be revised in areas where it is weak.

Action Resulting From Implementation	Instructional Time Reduced	New Material Added		Other: Revision

Comments

While evaluating the material, it was impossible to stay strictly with an in-class supervised method of implementation. For numerous reasons, some out-of-class study was necessary for a few students.

MODULE EVALUATION REPORT

PART I -- THE MODULE

Title of Publication			
Techniques of Instruction, Guide to Student Presentations; Part I: "Preparing A Lesson Plan"			
Author/Institution			Date of Publication
Dr. Jeff A. Pyatte, Faculty of Professional Education, University of West Florida, Pensacola, Florida 32504			February 1971
Type		Student Sample	
Self-instructional		14 Inservice Teachers	
Number of Pages	Minimum Time	Mean Time	Maximum Time
Thirty-two (32)	65 Minutes	79 Minutes	90 Minutes

Scope of Module

Planning a lesson using concept of a teaching model; making a lesson plan according to organizational principles of outlining; selecting appropriate topic for 5-15 minute lesson; developing plan for 5-15 minute lesson (includes samples of plans which have been successfully implemented).

PART II -- EVALUATION PROCEDURE AND DATA

Group/Mode	N	Pretest Mean(raw)	Percent Correct	Post Test Mean(raw)	Percent Correct	Gain/Loss Pre to Post Test					No. Items on Pre/Post Test
Single Mode (Self-instructional)	9[1]	0.6	4.0	9.4	63.0	59.0					15

PART III -- METHOD OF IMPLEMENTATION

Planned Method of Implementation in Instructional Situation	Individual Study	Collateral Study	In-Class Study (Supervised)	Other
			X	

Objectives were not achieved by most inservice teachers. Material should be revised in areas where it is weak. After revision, material should be reevaluated with inservice teachers.

Action Resulting From Implementation	Instructional Time Reduced	New Material Added		Other
				Reevaluate using same method

Comments

[1] Five inservice teachers failed to show for posttest.

It was found that more time was needed for the inservice teachers to work on the module than was available. Recommendation to revise was based partly on results with preservice teachers.

MODULE EVALUATION REPORT

PART I -- THE MODULE

Title of Publication			
Technique of Instruction, Guide to Student Presentations, Part II: "Making A Presentation"			
Author/Institution: Dr. Jeff A. Pyatte, Faculty of Professional Education, University of West Florida, Pensacola, Florida 32504			Date of Publication: February 1971
Type: Self-instructional		Student Sample: 32 preservice teachers	
Number of Pages: Twenty-one (21)	Minimum Time: 15 minutes	Mean Time: 75 minutes	Maximum Time: 155 minutes

Scope of Module

Use of a lesson plan prepared in Part I "Preparing a Lesson Plan" is required; techniques of making effective presentations; overcoming fear of making presentations; preparing note cards; a presentation to peers who serve as a "laboratory" class is required.

PART II -- EVALUATION PROCEDURE AND DATA

Group/Mode	N	Pretest Mean(raw)	Percent Correct	Post Test Mean(raw)	Percent Correct	To Gain/Loss Pre to Post Test					No. Items on Pre/Post Test
Singe Mode (Self-instructional)	32	0.0	0.0	3.5	85.0	85.0					4

PART III -- METHOD OF IMPLEMENTATION

Planned Method of Implementation in Instructional Situation	Individual Study	Collateral Study	In-Class Study (Supervised)	Other
			X	

Objectives were achieved by most of the preservice teachers. Revision of materials is not indicated.

Action Resulting From Implementation	Instructional Time Reduced	New Material Added		Other
				Implemented under homework method

Comments

The module can be successfully completed by preservice teachers in class under supervision. It probably could be as successfully completed as an out-of-class assignment.

MODULE EVALUATION REPORT

PART I -- THE MODULE

Title of Publication			
Techniques of Instruction, Guide to Student Presentations, Part II "Making A Presentation"			
Author/Institution: Dr. Jeff A. Pyatte, Faculty of Professional Education, University of West Florida, Pensacola, Florida 32504			Date of Publication: February 1971
Type: Self-instructional		Student Sample: 14 inservice teachers	
Number of Pages: Twenty-one (21)	Minimum Time	Mean Time: 70 minutes[1]	Maximum Time

Scope of Module

Use of a lesson plan prepared in Part I "Preparing a Lesson Plan" is required; Techniques of making effective presentations; overcoming fear of making presentations; preparing note cards; a presentation to peers who serve as a "laboratory" class is required.

PART II -- EVALUATION PROCEDURE AND DATA

Group/Mode	N	Pretest Mean(raw)	Percent Correct	Post Test Mean(raw)	Percent Correct	To Gain/Loss Pre to Post Test					No. Items on Pre/Post Test
Single Mode (self-instructional)	7[2]	0.0	0.0	3.2	80.0	80.0					4

PART III -- METHOD OF IMPLEMENTATION

Planned Method of Implementation in Instructional Situation	Individual Study	Collateral Study	In-Class Study (Supervised)	Other
			X	

Objectives were achieved by most of the inservice teachers. Revision of materials is not indicated.

Action Resulting From Implementation	Instructional Time Reduced	New Material Added		Other
				Implement under homework method

Comments

[1] Only about ninty minutes were available for the module on presenting. Minimum and maximum times are not very meaningful and are not included.

[2] Five inservice teachers failed to show up to take the module on presenting; two did not complete it in the alotted time.

MODULE EVALUATION REPORT

The form is an adaptation of form CNABATRA 1540111 (11-66) used by the Naval Air Basic Training Command for reporting evaluations of programmed training materials.[1] It is divided into three parts, each of which has several subdivisions.

PART I. THE MODULE

1. Title of Publication.	Title as it appears on the module.
2. Author/Institution.	Name of individual who is responsible for writing and revising module. Institutional affiliation of author.
3. Date of Publication.	Date that appears on module.
4. Type.	Mode of instruction, eg., programmed, self-instructional, textual, etc.
5. Student Sample.	Total number of students who participated in the evaluation.
6. Number of Pages.	Total number of pages in the module.
7. Time Required to Complete the Module.	
Minimum Time.	Time required for first student to complete the module.
Mean Time.	The mean (arithmetic) time required for all students to complete the module.
Maximum Time.	Time required for last student to complete the module.
8. Scope of Module.	Summary of the objectives of the module.

[1]Charles B. Havens, Measuring Effectiveness of Programmed Instruction (Pensacola, Fla.: Naval Air Basic Training Command, CNABT P-771 PAT), p. 29.

PART II. EVALUATION PROCEDURE AND DATA

1. Group/Mode.	Modes of instruction when comparisons are made, eg., self-instructional vs. lecture.
2. N = Number of Students.	Number of students used. Number in each group when comparative studies are made.
3. Pretest Mean (Raw).	Arithmetic average of the raw scores obtained by students on the pretest.
4. Percent Correct.	Percent mean score is of total number of items on the pre/posttests.
5. Posttest Mean (Raw).	Arithmetic average of the raw scores obtained by students on the posttest.
6. Percent Correct.	Percent mean score is of the total number of items on the pre/posttests.
7. Percent Gain Pre to Posttest.	Difference of percent correct for posttest and percent correct for pretest.
8. Number of Items in Pre/Posttests.	Number of items on test. (Identical test items in the same sequence must be used on both pre and posttests.)

PART III. METHOD OF IMPLEMENTATION

1. Individual Study.	Individual, out-of-class study (unsupervised).
2. Collateral Study.	Individual, out-of-class assigned study; homework (unsupervised).
3. In Class Study.	Individual study in class under supervision.
4. Other.	Mixed or other methods.

Part III is reserved for notes, comments and action resulting from implementation of the module.